What is Claimed is:

1. A semiconductor device comprising:

a substrate coated with an insulating layer;

a connecting part connected to a conductive layer through the insulating layer of the substrate;

a seed separating layer formed around the connecting part and the insulating layer to provide an open region that exposes at least part of the connecting part;

a seed layer disposed in the open region of the seed separating layer; and

a capacitor comprising a lower electrode formed on the seed layer, a dielectric medium formed on the lower electrode, and an upper electrode formed on the dielectric medium.

2. The semiconductor device as claimed in claim 1, wherein the seed layer is filled into the open region, and is disposed between the connecting part and the dielectric medium.

3. The semiconductor device as claimed in claim 1, wherein the seed separating layer comprises a material having an etch selection ratio with the insulating layer.

4. The semiconductor device as claimed in claim 1, wherein the seed separating layer has a thickness of ranging from about 50Å to about 2000Å.

5. The semiconductor device as claimed in claim 1, wherein the seed layer is formed of a material selected from the group consisting of Pt, Ru, Ir, Os, W, Mo, Co, Ni, Au and Ag.

6. The semiconductor device as claimed in claim 1, wherein the seed layer has a thickness ranging from about 100Å to about 10000Å.

7. The semiconductor device as claimed in claim 1, wherein the connecting part is planarized with the insulating layer.

8. The semiconductor device as claimed in claim 1, wherein the connecting part comprises a plug and a barrier layer.

9. The semiconductor device as claimed in claim 8, wherein the plug comprises at least one material selected from the group consisting of polysilicon, tungsten (W), W-silicide), TiN, TiAlN, TaSiN, TiSiN, TaN, TaAlN, TiSi and TaSi.

10. The semiconductor device as claimed in claim 8, wherein the barrier layer comprises a barrier metal layer and an oxygen diffusion barrier layer.

11. The semiconductor device as claimed in claim 10, wherein the oxygen diffusion barrier layer comprises at least one material selected from the group consisting of Ir, Ru, Pt, Re, Ni, Co and Mo.

12. The semiconductor device as claimed in claim 10, wherein the barrier metal layer comprises at least one material selected from the group consisting of TiN, TiAlN, TaSiN, TiSiN, TaN, RuTiN and RuTiO.

13. A method for fabricating a semiconductor device comprising:

forming a connecting part connected to a conductive layer through an insulating layer of a substrate;

forming a seed separating layer around the connecting part and the insulating layer to provide an open region exposing the connecting part;

forming a seed layer to fill the open region of the seed separating layer and cover the connecting part;

forming a lower electrode of a capacitor upon the seed layer;

forming a dielectric medium of the capacitor upon the lower electrode; and

forming an upper electrode of the capacitor upon the dielectric medium.

14. The method as claimed in claim 13, wherein the open region of the seed separating layer is formed on part of the connecting part and on part of the insulating layer.

15. The method as claimed in claim 13, wherein the step of forming the seed layer in the open region comprises:

depositing the seed layer on an entire surface of the seed separating layer and in the open region; and

carrying out a planarization to remove portions of the seed layer remaining on the seed separating layer.

16. The method as claimed in claim 13, wherein the seed separating layer has an etch selection ratio with the insulating layer.

17. The method as claimed in claim 13, wherein the insulating layer has a thickness ranging from about 50Å to about 2000Å.

18. The method as claimed in claim 13, wherein the step of forming the lower electrode comprises:

forming a capacitor sacrificial film pattern and etching the capacitor sacrificial film so as to expose the seed layer;

forming the lower electrode on the exposed seed layer by carrying out an electrochemical deposition method;

removing the capacitor sacrificial film; and

etching back the seed layer, for separating adjacent parts of the lower electrode.

19. The method as claimed in claim 13, wherein the seed layer comprises at least one material selected from the group consisting of Pt, Ru, Ir, Os, W, Mo, Co, Ni, Au and Ag.

20. A semiconductor device made in accordance with the method of claim 13.